

CRF Errors Corrected by the STIC System Branch

O/PE 0190

Serial Number: 09/910,082A

CRF Processing Date: 1/15/2002
 Edited by: _____
 Verified by: Mc (STIC staff)

ENTERED

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted **ending** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☒ Other: Seqs 54, 134, 161, 185 - moved <223> response up one line

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

OIPE

RAW SEQUENCE LISTING

DATE: 01/15/2002

PATENT APPLICATION: US/09/910,082A

TIME: 20:22:54

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\01152002\I910082A.raw

P.5

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3 <110> APPLICANT: University of Utah Research Foundation
4      Cognetix, Inc.
5      Olivera, Baldomero M.
6      McIntosh, J. Michael
7      Watkins, Maren
8      Garrett, James E.
9      Shon, Ki-Joon
10     Jacobsen, Richard
11     Jones, Robert M.
12     Cartier, G. Edward
14 <120> TITLE OF INVENTION: Omega-Conopeptides
16 <130> FILE REFERENCE: 2314-241
C--> 18 <140> CURRENT APPLICATION NUMBER: US/09/910,082A
C--> 18 <141> CURRENT FILING DATE: 2001-07-23
18 <150> PRIOR APPLICATION NUMBER: US 60/219,616
19 <151> PRIOR FILING DATE: 2000-07-21
21 <150> PRIOR APPLICATION NUMBER: US 60/265,888
22 <151> PRIOR FILING DATE: 2001-02-05
24 <160> NUMBER OF SEQ ID NOS: 413
26 <170> SOFTWARE: PatentIn version 3.0
28 <210> SEQ ID NO: 1
29 <211> LENGTH: 318
30 <212> TYPE: DNA
31 <213> ORGANISM: Unknown
33 <220> FEATURE:
34 <223> OTHER INFORMATION: unknown Conus species
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37 ggatccatga aactgacgtg catggtgata gtcgccgtgc tgctcctgac ggcctgtcaa      60
39 ctcatacacag ctgatgactc cagaggtacg cagaagcatt atgccctgag gtcgaccacc      120
41 aattttctcca cggttgactcg tcgtctgcctt tctcccgat cagcatgtca taagacaatg      180
43 cgtaactgct gcaattcatg ctcttcatac aaagggaaat gtcggcctcg aaaatgaacc      240
45 actcatcacc tactcctctg gaggcctcag aggaattaca ttgaaataaa agccgcatta      300
47 caaaaaaaaa aaaaaaaaaa                                     318
50 <210> SEQ ID NO: 2
51 <211> LENGTH: 76
52 <212> TYPE: PRT
53 <213> ORGANISM: Unknown
55 <220> FEATURE:
56 <223> OTHER INFORMATION: unknown Conus species
58 <400> SEQUENCE: 2
60 Met Lys Leu Thr Cys Met Val Ile Val Ala Val Leu Leu Leu Thr Ala
61 1          5          10          15
63 Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His His
64          20          25          30
66 Ala Leu Arg Ser Thr Thr Asn Phe Ser Thr Leu Thr Arg Arg Cys Leu
67          35          40          45
69 Ser Pro Gly Ser Arg Cys His Lys Thr Met Arg Asn Cys Cys Thr Ser

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70 50 55 60
 72 Cys Ser Ser Tyr Lys Gly Lys Cys Arg Pro Arg Lys
 73 65 70 75

75 <210> SEQ ID NO: 3

76 <211> LENGTH: 30

77 <212> TYPE: PRT

78 <213> ORGANISM: Unknown

80 <220> FEATURE:

81 <223> OTHER INFORMATION: unknown Conus species

83 <220> FEATURE:

84 <221> NAME/KEY: PEPTIDE

85 <222> LOCATION: (1)..(30)

86 <223> OTHER INFORMATION: Xaa at residue 4 and 28 is Pro or Hyp; Xaa at residue 22 is

Tyr,

87 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-T

88 yr

91 <400> SEQUENCE: 3

Wt f> 93 Cys Leu Ser Xaa Gly Ser Arg Cys His Lys Thr Met Arg Asn Cys Cys

94 1 5 10 15

Wt f> 96 Thr Ser Cys Ser Ser Xaa Lys Gly Lys Cys Arg Xaa Arg Lys

97 20 25 30

99 <210> SEQ ID NO: 4

100 <211> LENGTH: 283

101 <212> TYPE: DNA

102 <213> ORGANISM: Unknown

104 <220> FEATURE:

105 <223> OTHER INFORMATION: unknown Conus species

107 <400> SEQUENCE: 4

108 ggatccatga aactgacgtg cgtgggtgac gtcgccgtgc tgctcctgac ggtctgtcaa 60

110 ctcatcacag ctgatgactc cagaggtacg cagaagcatc atgccctgag gtcgaccacc 120

112 aattttctcca cgtcgactcg tcgctgcaaa cctcccgga gaaaatgtct gaatagaaag 180

114 aatgaatgct gcagcaagtt ttgcaatgaa cacctacata tgtgtggata aatggctaaa 240

116 aactgaataa aagccgcatt gcaaaaaaaaa aaaaaaaaaa aaa 283

119 <210> SEQ ID NO: 5

120 <211> LENGTH: 74

121 <212> TYPE: PRT

122 <213> ORGANISM: Unknown

124 <220> FEATURE:

125 <223> OTHER INFORMATION: unknown Conus species

127 <400> SEQUENCE: 5

129 Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Leu Thr Val

130 1 5 10 15

132 Cys Gln Leu Ile Thr Ala Asp Asp Ser Arg Gly Thr Gln Lys His His

133 20 25 30

135 Ala Leu Arg Ser Thr Thr Asn Phe Ser Thr Ser Thr Arg Arg Cys Lys

136 35 40 45

138 Pro Pro Gly Arg Lys Cys Leu Asn Arg Lys Asn Glu Cys Cys Ser Lys

139 50 55 60

141 Phe Cys Asn Glu His Leu His Met Cys Gly

142 65 70

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Input Set : A:\PTO.AMC.txt

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144 <210> SEQ ID NO: 6
 145 <211> LENGTH: 27
 146 <212> TYPE: PRT
 147 <213> ORGANISM: Unknown
 149 <220> FEATURE:
 150 <223> OTHER INFORMATION: unknown Conus species
 152 <220> FEATURE:
 153 <221> NAME/KEY: PEPTIDE
 154 <222> LOCATION: (1)..(27)
 155 <223> OTHER INFORMATION: Xaa at residue 14 and 22 is Glu or gamma-carboxy Glu; Xaa at

resi

156 due 3 and 4 is Pro or Hyp
 159 <400> SEQUENCE: 6
 161 Cys Lys Xaa Xaa Gly Arg Lys Cys Leu Asn Arg Lys Asn Xaa Cys Cys
 162 1 5 10 15
 W--> 164 Ser Lys Phe Cys Asn Xaa His Leu His Met Cys
 165 20 25

167 <210> SEQ ID NO: 7
 168 <211> LENGTH: 275
 169 <212> TYPE: DNA
 170 <213> ORGANISM: Unknown
 172 <220> FEATURE:
 173 <223> OTHER INFORMATION: unknown Conus species
 175 <400> SEQUENCE: 7
 176 ggatccatga aactgacgtg cgtggtgata gtcgccgtgc tgctcctgac ggcctgtcaa 60
 178 ctctgtcacag ctgatggctc cagaggtatg cagaagcatt atgccctgag gtcgaccacc 120
 180 aatctctcca tatcgtctcg ctgcaaacct cccagaagaa aatgtctgaa gattaaggat 180
 182 aaatgctgca acttttgcaa tacacaccta aatatgtgtg gataaatggc taaaaactga 240
 184 ataaaagccg cattgcaaaa aaaaaaaaaa aaaaa 275

187 <210> SEQ ID NO: 8
 188 <211> LENGTH: 72
 189 <212> TYPE: PRT
 190 <213> ORGANISM: Unknown
 192 <220> FEATURE:
 193 <223> OTHER INFORMATION: unknown Conus species
 195 <400> SEQUENCE: 8
 197 Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Leu Thr Ala
 198 1 5 10 15
 200 Cys Gln Leu Val Thr Ala Asp Gly Ser Arg Gly Met Gln Lys His Tyr
 201 20 25 30
 203 Ala Leu Arg Ser Thr Thr Asn Leu Ser Ile Ser Ser Arg Cys Lys Pro
 204 35 40 45
 206 Pro Arg Arg Lys Cys Leu Lys Ile Lys Asp Lys Cys Cys Asn Phe Cys
 207 50 55 60
 209 Asn Thr His Leu Asn Met Cys Gly
 210 65 70
 212 <210> SEQ ID NO: 9
 213 <211> LENGTH: 26
 214 <212> TYPE: PRT
 215 <213> ORGANISM: Unknown

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Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\01152002\I910082A.raw

217 <220> FEATURE:
 218 <223> OTHER INFORMATION: unknown Conus species
 220 <220> FEATURE:
 221 <221> NAME/KEY: PEPTIDE
 222 <222> LOCATION: (1)..(26)
 223 <223> OTHER INFORMATION: Xaa at residue 3 and 4 is Pro or Hyp
 226 <400> SEQUENCE: 9
 228 Cys Lys Xaa Xaa Arg Arg Lys Cys Leu Lys Ile Lys Asp Lys Cys Cys
 229 1 5 10 15
 231 Asn Phe Cys Asn Thr His Leu Asn Met Cys
 232 20 25
 234 <210> SEQ ID NO: 10
 235 <211> LENGTH: 377
 236 <212> TYPE: DNA
 237 <213> ORGANISM: Unknown
 239 <220> FEATURE:
 240 <223> OTHER INFORMATION: unknown Conus species
 242 <400> SEQUENCE: 10
 243 ggatccatga aactgacgtg tgtggtgatc gtcgccgtgc tgctcctgat ggcctgtcaa 60
 245 ctcgtcacag ctgatggctc cagaggtatg cacaagcatt atgccctgag gtcgaccacc 120
 247 aaactctcca tgtcgactcg ctgocgaggt ccaggaacaa tttgtcctaa tagggatgc 180
 249 tgcggttatt gcagtaaaag aacacatcta tgtcattcgc gaactggctg atcttcccc 240
 251 ttctgcgctc catccttttc tgccctgagtc ctccatacct gagaatggtc atgaaccact 300
 253 caacacctac tcctctggag ggcctcagaa gagctacatt gaaataaaag ccgcattaca 360
 255 aaaaaaaaaa aaaaaaa 377
 258 <210> SEQ ID NO: 11
 259 <211> LENGTH: 74
 260 <212> TYPE: PRT
 261 <213> ORGANISM: Unknown
 263 <220> FEATURE:
 264 <223> OTHER INFORMATION: unknown Conus species
 266 <400> SEQUENCE: 11
 268 Met Lys Leu Thr Cys Val Val Ile Val Ala Val Leu Leu Leu Met Ala
 269 1 5 10 15
 271 Cys Gln Leu Val Thr Ala Asp Gly Ser Arg Gly Met His Lys His Tyr
 272 20 25 30
 274 Ala Leu Arg Ser Thr Thr Lys Leu Ser Met Ser Thr Arg Cys Ala Gly
 275 35 40 45
 277 Pro Gly Thr Ile Cys Pro Asn Arg Val Cys Cys Gly Tyr Cys Ser Lys
 278 50 55 60
 280 Arg Thr His Leu Cys His Ser Arg Thr Gly
 281 65 70
 283 <210> SEQ ID NO: 12
 284 <211> LENGTH: 28
 285 <212> TYPE: PRT
 286 <213> ORGANISM: Unknown
 288 <220> FEATURE:
 289 <223> OTHER INFORMATION: unknown Conus species
 291 <220> FEATURE:

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Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\01152002\I910082A.raw

292 <221> NAME/KEY: PEPTIDE
 293 <222> LOCATION: (1)..(28)
 294 <223> OTHER INFORMATION: Xaa at residue 4 and 9 is Pro or Hyp; Xaa at residue 16 is
 Tyr, 1
 295 25I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Ty
 296 r
 299 <400> SEQUENCE: 12
 301 Cys Ala Gly Xaa Gly Thr Ile Cys Xaa Asn Arg Val Cys Cys Gly Xaa
 302 1 5 10 15
 304 Cys Ser Lys Arg Thr His Leu Cys His Ser Arg Thr
 305 20 25
 307 <210> SEQ ID NO: 13
 308 <211> LENGTH: 323
 309 <212> TYPE: DNA
 310 <213> ORGANISM: Conus arenatus
 312 <400> SEQUENCE: 13
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 315 ctccattacag gtgagcagaa ggaccatgct ctgaggtcaa ctgacaaaaa ctccaagttg 120
 317 actaggcagt gctcggctaa cgggtggatct tgtactcgtc attttcactg ctgcagcctc 180
 319 tattgcaata aagattccag tgtatgtgtg gcaacctcat acccgtgagt ggccatgaac 240
 321 ccctcaatac cctctcctct ggaggcttca gaggaactgc attgaaataa aaccgcattg 300
 323 caataaaaaa aaaaaaaaaa aaa 323
 326 <210> SEQ ID NO: 14
 327 <211> LENGTH: 73
 328 <212> TYPE: PRT
 329 <213> ORGANISM: Conus arenatus
 331 <400> SEQUENCE: 14
 333 Met Lys Leu Thr Cys Met Val Ile Ile Ala Val Leu Phe Leu Thr Ala
 334 1 5 10 15
 336 Cys Gln Leu Ile Thr Gly Glu Gln Lys Asp His Ala Leu Arg Ser Thr
 337 20 25 30
 339 Asp Lys Asn Ser Lys Leu Thr Arg Gln Cys Ser Ala Asn Gly Gly Ser
 340 35 40 45
 342 Cys Thr Arg His Phe His Cys Cys Ser Leu Tyr Cys Asn Lys Asp Ser
 343 50 55 60
 345 Ser Val Cys Val Ala Thr Ser Tyr Pro
 346 65 70
 348 <210> SEQ ID NO: 15
 349 <211> LENGTH: 33
 350 <212> TYPE: PRT
 351 <213> ORGANISM: Conus arenatus
 353 <220> FEATURE:
 354 <221> NAME/KEY: PEPTIDE
 355 <222> LOCATION: (1)..(33)
 356 <223> OTHER INFORMATION: Xaa at residue 1 is Gln or pyro-Glu; Xaa at residue 33 is
 Pro or
 357 Hyp; Xaa at residue 19 and 32 is Tyr, 125I-Tyr, mono-iodo-Tyr, di
 358 -iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
 361 <400> SEQUENCE: 15
 363 Xaa Cys Ser Ala Asn Gly Gly Ser Cys Thr Arg His Phe His Cys Cys
 364 1 5 10 15

Use of n and/or Xaa has been detected in the Sequence Listing.
 Review the Sequence Listing to insure a corresponding
 explanation is presented in the <220> to <223> fields of
 each sequence using n or Xaa.

VERIFICATION SUMMARY

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TIME: 20:22:55

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\01152002\I910082A.raw

L:18 M:270 C: Current Application Number differs, Replaced Current Application No
L:18 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:93 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:96 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:161 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:164 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:228 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:301 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:363 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:366 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:369 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:428 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:431 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:490 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:493 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:496 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:555 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:558 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:618 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:646 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:686 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30
L:748 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33
L:751 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33
L:810 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36
L:813 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36
L:873 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39
L:937 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42
L:940 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42
L:1000 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45
L:1064 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48
L:1067 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48
L:1128 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51
L:1131 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51
L:1134 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51
L:1195 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54
L:1198 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54
L:1259 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57
L:1262 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57
L:1323 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60
L:1326 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60
L:1387 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63
L:1390 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63
L:1393 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63
L:1453 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66
L:1515 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69
L:1518 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69
L:1521 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69
L:1551 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71

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L:1599 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:74
L:1647 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:77
L:1694 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:80
L:1743 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:83